

## U.S. ENVIRONMENTAL PROTECTION AGENCY

## PUBLIC HEARING

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Zoom Public Meeting held on Thursday, July 15,  
2021 at 6:02 p.m. before Jamie S. Hurley, Court  
Reporter and Notary Public within and for the State  
of Ohio.

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## Present:

Ms. Diane Russell

Mr. Jim Saric

1 MS. RUSSELL: So, again, this is  
2 the Kalamazoo River Meeting that EPA's hosting to  
3 talk about what our proposed cleanup plan will be  
4 for a section of river that we have called Area 3.  
5 For tonight's meeting we are going to be recording  
6 and we're going to have the project manager, Jim  
7 Saric, in a few moments present a few slides and  
8 talk about what our plan, our proposed plan is and  
9 we'll have some time for some questions at the  
10 meeting but then we will take a point in the  
11 meeting where we will be accepting formal public  
12 comment.

13 At that time we won't be answering  
14 questions. Hopefully we'll get all the questions  
15 that we needed to have answered prior to that but  
16 there is a portion of this meeting that will be a  
17 formal accepting of public comment where EPA will  
18 not be providing a response in that realtime, just  
19 making sure everyone is aware of that.

20 And, again, tonight's meeting will  
21 go from 6 to 8 tonight and you can submit comments  
22 tonight but you can also submit comments via mail  
23 and we have information at our website which is  
24 shown on our screen but it's also  
25 [www.epa.gov/superfund/allied-paper-kalamazoo](http://www.epa.gov/superfund/allied-paper-kalamazoo).

1 That's a lot it try to write down but if you go to  
2 Google and Google EPA Kalamazoo River, you'll come  
3 up with our website. There is a form online you  
4 can submit comments and also the mailing  
5 information to send those comments via mail. You  
6 can, of course, do that, submit your comment  
7 tonight.

8 We have a court reporter at this  
9 meeting to record not only the meeting portion but  
10 also the formal comment and we have a set of  
11 instructions that we will share later on how you  
12 can, for those of you on the computer or on the  
13 phone how you can submit those comments. So,  
14 again, if you're dialing in, you can mute your line  
15 by hitting star 6 and we ask that everyone keep  
16 themselves muted as we come into this portion of  
17 the meeting so that as our project manager is  
18 talking to you about what the proposal is we don't  
19 have any background noise.

20 We can go to the next slide. So  
21 just, again, some housekeeping things I wanted you  
22 all to know, we ask that all lines are muted during  
23 the meeting that, so that we don't have any  
24 background noise. We are recording this to make  
25 available at a later time. We also have a court

1 reporter at this meeting to record the contents of  
2 the meeting and then we will also have that  
3 transcript available on our website after the  
4 meeting. And for those of you who are dialing in  
5 because this is being recorded just as a courtesy  
6 if you, if you wanted to hide your phone number you  
7 can hang up and, and before you dial the number  
8 that you dialed to access this meeting you can hit  
9 star 67 and that will hide your phone number just  
10 so you know.

11 If we could move on, just a couple  
12 other things I wanted to let you know if you're not  
13 as familiar with Zoom in this program in this  
14 virtual format there is a chat box that you can  
15 type questions into and myself and my colleague,  
16 Meg, will be monitoring that chat box as we go  
17 through the presentation to let Jim know if there's  
18 any questions so that is an option for those of you  
19 who are using your computer.

20 You can use your chat box to type  
21 a question and we will get to that. Also, you can  
22 raise your hand and the option for, to do that is  
23 if you open the participant window and find your  
24 name. At the bottom of that screen it should have  
25 a raise your hand icon. So that is a way for us to

1 see those who are at the meeting, if you have a  
2 question you can raise your hand. And you can then  
3 unmute. We'll call on you and then you can unmute  
4 to speak. For those of you on the cell phone you  
5 can actually virtually raise your hand by hitting  
6 star 9 on your keypad and so if you hit star 9 it  
7 raises your hand.

8 If you hit star 9 again it lowers  
9 it after we called on you. To mute and unmute your  
10 line on your phone you can hit star 6. That does  
11 both the muting and unmuting. Again, we ask that  
12 you, everyone mute their line as we get started so  
13 that we are, we can have an uninterrupted, from  
14 background noises for Jim's presentation.

15 So, with that, I'm just going to  
16 go ahead and introduce myself and then I'll  
17 actually kick it over to Jim Saric. My name is  
18 Diane Russell. I am EPA's community involvement  
19 coordinator who will help guide you through this  
20 meeting tonight. This meeting, again, is about our  
21 proposed cleanup plan for a section of the  
22 Kalamazoo River that we've called area 3. We have  
23 information on our website for you to, for  
24 residents and folks to review and we are in a  
25 public comment period between, which is taking

1 place now and through August 6th for you to submit  
2 comments on the plan that you can submit via an  
3 online form on our website, send in the mail, or  
4 submit via a comment at tonight's meeting. So  
5 those are the options that you can use to submit a  
6 comment on this proposed plan.

7 So, with that, it's about 8 after  
8 6, want to keep things moving along. We'll go  
9 ahead and, Jim, I'm going to kick this over to you  
10 to get things started to explain area 3's proposed  
11 cleanup plan.

12 MR. SARIC: All right, Diane. Let  
13 me just share my screen here and would allow me to,  
14 I don't know. Did that show up? Can you see part  
15 of the presentation now or no?

16 MS. RUSSELL: It might take just a  
17 second but we'll be patient for --

18 MR. SARIC: Okay.

19 MS. RUSSELL: You might have to  
20 hit another button that says share screen. It's  
21 usually --

22 MR. SARIC: Okay. Let me try  
23 again. Hold on. Share, I see that --

24 MS. RUSSELL: Yeah. There's  
25 another --

1 MR. SARIC: -- entire screen,  
2 right, or is it window? I'll just do this, share.  
3 Okay.

4 MS. RUSSELL: There we go.

5 MR. SARIC: That should, and if I  
6 do this to the slideshow it should be a larger  
7 screen now.

8 MS. RUSSELL: Yes.

9 MR. SARIC: Okay. Excellent.  
10 Well, thanks, everybody, for coming out. I'm Jim  
11 Saric. I'm the remedial, EPA remedial project  
12 manager in charge of the Kalamazoo River cleanup  
13 and I'm going to layout and present kind of EPA's  
14 proposed alternative for the Kalamazoo River site  
15 and its proposed plan. And as Diane said, you  
16 know, we're going to have comments afterward, it's  
17 there.

18 And so to give you an idea of  
19 where we are in this process, so tonight we're  
20 going talk about this proposed remedy, the proposed  
21 plan for area 3 of operable unit 5 of the Kalamazoo  
22 River and I'll explain that further in a minute and  
23 then we'll get, we'll receive the public comments,  
24 and then after the public comment period, EPA, we  
25 respond to the comments and develop this

1 responsiveness summary which ultimately gets  
2 attached to the record of decision and we hope to  
3 finalize the record of decision in the fall of 2021  
4 that would kind of formalize the Agency decision on  
5 what remedy gets implemented for area 3. That will  
6 give you some idea.

7 Now, for those of you who are  
8 familiar or are not familiar with the site, this  
9 Allied Paper Portage Creek Kalamazoo River  
10 Superfund Site, we've divided it up into several  
11 different areas or sections. We call them operable  
12 units. They are kind of workable units that we  
13 manage and each one's had a decision. And there's  
14 several landfills on this site and a paper mill.

15 And tonight what we're going to  
16 talk about is operable unit 5 which includes  
17 Portage Creek and 80 miles of the Kalamazoo River.  
18 And, and this shows, this particular slide here  
19 shows that Kalamazoo River which is operable unit 5  
20 and each of the Kalamazoo River, this 80-mile  
21 stretch, we've divided it up into seven different  
22 areas, each of them separated by dams. And area 3  
23 is what's kind of highlighted in this oval area and  
24 that's what we're going to talk about tonight.

25 And I just want to pause for one



1 second and make sure everybody can hear me clearly.  
2 Diane, are we okay, good, and see everything and  
3 just, as I keep going?

4 MS. RUSSELL: So far everything  
5 looks good. I'll just once again take this chance  
6 to remind everyone to mute their lines if they have  
7 not done so already. Thank you.

8 MR. SARIC: Yeah. So we're going  
9 talk about area 3 and area 3 is approximately a 3  
10 and a half, it's a 3.4 mile stretch of river and if  
11 you can see on the right in the thing, it starts,  
12 it's the areas between the Otsego City Dam and the  
13 river flows to the west through here all the way to  
14 the location, the former Otsego Dam.

15 So you've got this 3 and a half  
16 mile stretch, 3.4 mile stretch and I'll also want  
17 to call your attention right in the middle. This  
18 is the M-89 bridge and it really kind of divides  
19 this section of the river into let's say an  
20 upstream section and a downstream section. And  
21 this upstream section of the Kalamazoo River here  
22 between the Otsego City Dam and the M-89 bridge can  
23 really characterize it as fast moving. It's real  
24 shallow. It's got a rocky bottom. There's less  
25 than a foot of sediment anywhere really in this

1 section.

2                   And for any of who may have had a  
3 boat in this area they know how it's pretty  
4 difficult to kind of get through here because it's  
5 so shallow and moving through swift moving water  
6 from here. And then the downstream section,  
7 though, from the M-89 bridge downstream to the  
8 former Otsego City Dam, this area's wider. The  
9 water moves a little bit slowly and you've got a  
10 little bit more extensive floodplain to the right  
11 and left banks that are there that, you know,  
12 historically the water level when the dam was there  
13 was, you know, several feet higher and the area was  
14 kind of impound, or formed a miniature lake, if you  
15 will, that was there as part of that.

16                  So, you know, that downstream area  
17 is different and then also you see this Pine Creek  
18 impalement. This is connected as part of this  
19 study area, of area 3 as well because during the  
20 '50s to the '70s when the water level, when the dam  
21 was higher and the water level in the river was  
22 higher you had the ability of water during high  
23 flow events to come from the Kalamazoo River into  
24 Pine Creek. And so we had some contamination that  
25 was able to get in there.

1                   Now, around in the early '70s the  
2 water level and the dam and Otsego Dam was lower  
3 and now they actually formed a dam structure  
4 between the Pine Creek impalement and the river and  
5 now it's about, Pine Creek is about 50 feet higher  
6 than the Kalamazoo River.

7                   So today there's no way water  
8 could get from the Kalamazoo River up into the Pine  
9 Creek Impalement but back between the '50s and '70s  
10 it was and that's why it's kind of covered as part  
11 of this, you know, this area. So conceptually what  
12 happened here in the site is between the '50s and  
13 the '70s there were PCBs that were discharged into  
14 the river as a result of recycling of carbonless  
15 copy paper in the related operations.

16                  So you had PCBs getting into the  
17 sediment that were along the floodplain banks and  
18 the biggest risk is kind of the, you know, the fact  
19 that you had PCBs in the sediment, the fish, you  
20 would get uptake into the fish. So the biggest  
21 human health risk is people consuming fish that's  
22 there and then up into the floodplains where you  
23 had flood events or you had previous kind of lake  
24 or impalement areas you have ecological exposure,  
25 you know, to some of the, you know, the mammals,

1 the birds up in the floodplain that's there.

2 That's kind of the primary risk  
3 that's happening at the site. Now, we've had, as  
4 I've said, we've have several landfills and paper  
5 mills and EPA has worked with the responsible  
6 parties and we've addressed those where they're no  
7 longer sources of contamination to the river or  
8 actually the only remedy that's left to kind of get  
9 implemented is the one in operable unit 1 at the  
10 Allied landfill.

11 And we're working on that and just  
12 started that activity but, and we're finishing up  
13 one in the Plainwell Mill but overall all of the,  
14 all of the paper mills and the landfills, those are  
15 no longer sources of contamination to the river.  
16 And the only true ongoing sources are where you  
17 have bank erosion ongoing and actually contaminated  
18 sediment that exists. And to give you some idea if  
19 you can imagine what one, if you had a higher dam,  
20 the area where the dam was higher what you did  
21 commonly for the '50s to the '70s and then in the  
22 '70s and early '80s you had a lowering of the dam.

23 What happens is when you lowered  
24 that water level that former lake or impalement now  
25 you had this contaminated floodplain that has PCB

1 sediment in it and it was now a floodplain. So you  
2 had a previous lake environment where basically the  
3 lake bottom had PCBs in it. Now you lower the dams  
4 and now you've got floodplains that are  
5 contaminated and now you've got this channel that  
6 actually wants to erode more because the velocity  
7 is faster in the channel so you get the banks to  
8 kind of erode into the channel and more  
9 contamination and that's conceptually what's kind  
10 of gone on.

11 Now, as we go through and do any  
12 of these cleanups we establish what we call  
13 remedial action objective, you know, kind of what  
14 are we trying to get at? What are our targets?  
15 What are our objectives? And we use these to help  
16 focus how we're going to do the cleanup and what's  
17 the purpose of the cleanup, if you will, kind of  
18 the objectives and then we ultimately develop  
19 cleanup numbers from there which I'll get to in a  
20 second but we have a series of remedial action  
21 objectives.

22 And for area 3 these are the same  
23 remedial action objectives that we've had for area  
24 1 which is upstream which you've had a decision for  
25 and area 2 so they are very similar. Those of you

1 that have been involved with the project for a  
2 while may recognize some of these remedial action  
3 objectives and essentially the first one is to kind  
4 of protect people who consume fish from area 3 and  
5 try to get those fish down to protective levels.  
6 That's what we're trying to do.

7 So the idea is we're trying to  
8 clean up the sediment and a term you'll hear is  
9 called a SWAC which is a surface weighted average  
10 concentration. So basically what we're trying to  
11 do in area 3 is, is by, we're trying to get that  
12 sediment to the surface weighted average  
13 concentration of 0.33 milligrams or kilogram or PCB  
14 or less in area 3 by, when we, by the time we  
15 complete the remedy.

16 And the idea is if we can get that  
17 concentration there to that .33 or lower the fish  
18 tissue will come down over time. That's, that's  
19 kind of what we know, so, and the reason why we use  
20 this SWAC number is because in looking at sediment  
21 the idea is that you consider a fish swimming  
22 through an area and a fish doesn't live in one  
23 small area. They might live in a couple-mile home  
24 range as we call it that they live in.

25 So we want that average

1 concentration there to be around that 0.33 or less  
2 and, therefore, if that's the case the fish tissue  
3 will go down and, and the idea is that right now  
4 there's fish advisories throughout the river that  
5 are do not eat. And we want to get, our objective  
6 is to get that fish tissue down quickly, collect  
7 small mouth bass to where you can go from don't eat  
8 any to at least get down to, you know, two meals a  
9 month or even lower is what we're trying to get to  
10 and try to get to these lower, lower levels of fish  
11 tissue.

12 That's what we're trying to  
13 achieve with remedial action objective number 1.  
14 We have others, you know. Remedial action  
15 objective 2 is to look at aquatic ecological  
16 receptors which is like a mink that might actually,  
17 live on land but also eat fish from there.  
18 Remedial action 3 is to really look at kind of the  
19 terrestrial ecological receptors.

20 So up in the floodplain we're  
21 concerned about making sure that we restore the  
22 floodplains and that's really important here in  
23 area 3 that's, let's say, for both the mammals and  
24 the birds that are protected there, any  
25 recreational, any other user in the floodplain.

Remedial action objective number 4

or RAO 4 is important because overall we want to reduce that downstream transport of PCBs from area 3 further down in the Kalamazoo and into Lake Michigan. We're trying to reduce that and with some of that bank erosion being at, as I discussed, it's real important to make sure the banks are stable to kind of reduce that downstream transport.

And last but certainly not least is RAO 5 which we want to protect people in area 3 that are exposed to PCBs or Dioxins in the area. So those are the remedial action objectives that we look at and then from there ultimately we develop these preliminary remediation goals that ultimately once we get the ROD signed, the record of decision signed become cleanup levels. And for fish tissue our cleanup level is this 0.042 milligrams per liters.

That's the number for fish tissue we're trying to get to over time and we believe, again, if we take the sediment and get that surface weighted average concentration down to 0.33, you know, then we're going to get the fish tissue over time to get to that 0.42. And no matter what, we're going to monitor this and we'll get to that



1 but it takes monitoring to figure out, do the fish  
2 get there or not, and we'll go there.

3 In the floodplain we have a couple  
4 different preliminary remediation goals. For the  
5 properties for the parcels of land if you will that  
6 are truly residential, you've got a backyard that's  
7 it up there. Our cleanup number for that  
8 floodplain is 2.5 milligrams per kilogram.

9 For the over areas that are, you  
10 know, more recreational property, some of it's  
11 owned by the State of Michigan, owned by the DNR.  
12 If you were a recreational user the number would be  
13 23 to be, but, but we use the 11 because that's  
14 lower. The 11 milligram per kilogram is our  
15 ecological number. So in the floodplain the 11  
16 milligram per kilogram number is the PRG we used to  
17 kind of go after floodplain soils because we know  
18 it's protective of the recreational user because  
19 it's lower than the 23 and then if the property is  
20 residential we'll apply the 2.5 and that's how we  
21 approach this from here.

22 Now, here's a figure I want to  
23 show of kind of some of the PCB concentrations in  
24 area 3 from the, we did this remedial  
25 investigation. So we took samples in 2007, 2009,

1 2013, you know, over 1,700 samples we've collected  
2 in as part of our remedial investigation. It's  
3 gone on for several years, looking at the nature  
4 and extent of contamination in area 3 and I just  
5 want to bring, kind of highlight some of this for a  
6 bigger picture of what this means. So from a color  
7 scheme the dots that are like light gray or white,  
8 you know, or even dark gray, that really means that  
9 the concentration is very low.

10 Typically concentration is less  
11 than one part per million. But when you have  
12 concentration the colors that are yellows or  
13 oranges or reds, that's where you have the much  
14 higher level of concentrations, PCB concentrations  
15 that definitely need to be addressed. And, and  
16 just briefly here's that M-89 bridge in the middle.  
17 If you look upstream, that upstream portion from  
18 the Otsego City Dam down through to the M-89 bridge  
19 you see colors that are pretty light gray and  
20 white.

21 We don't have much, you know,  
22 contamination in there out, except for a few areas  
23 along the bank. We don't really have it in the  
24 sediment because there isn't much sediment there at  
25 all and the floodplain doesn't have much either.

1     However, looking downstream of the M-89 bridge you  
2     see a lot more of the color, right. You can see a  
3     lot more of the color that's here that definitely  
4     needed to be addressed. You look in Pine Creek,  
5     again, you don't see much and we've had a lot of  
6     samples in Pine Creek that don't show much  
7     contamination that's there as well and, from there.

8                 So, however, when we knew we had  
9     contamination downstream of the M-89 bridge we knew  
10    that we needed to do something there and likewise  
11    this former Otsego Township Dam you have, you can  
12    see that years ago we looked at it that that area  
13    was, you know, eroding and so we knew that we had  
14    an issue with the Otsego Township Dam was, you  
15    know, was in bad shape. We had a lot of  
16    contamination downstream of the M-89 bridge between  
17    there and the Otsego Dam.

18                So in 2016 to 2018 EPA worked with  
19    Georgia-Pacific and Weyerhaeuser and International  
20    Paper and we conducted a time criteria removal  
21    action in that area. And many of you who are, you  
22    know, in the Otsego area and are familiar with this  
23    you'll be familiar with some of the work that Paul  
24    Roush, my EPA counterpart, onset coordinator worked  
25    with everyone and talked about.

1                   So in 2016, 2017 we did this bank  
2 work so the idea was along these banks we basically  
3 reached in to kind of the tow of the bank and we  
4 pulled out the contamination along the bank and  
5 created this minimum of 10-foot buffer but actually  
6 when you sloped it to make a, a kind of a shallow  
7 bank or a stable bank to a 3 to 1 or more slope you  
8 really had a closer to a 25-foot clean buffer that  
9 was created all along the both sides of the banks  
10 and for those of you, go back one.

11                   For those of you have, are  
12 familiar with the area you can see how we've  
13 restored those banks with more of a natural  
14 restoration and we kind of created this clean  
15 buffer between the river and the banks. And then  
16 in the river itself these yellow areas are areas  
17 where we actually reached in from shore in the bank  
18 and removed this contaminated sediment there.

19                   It was, you know, in this portion  
20 of the channel and a lot of that was from the bank  
21 sluffing off or falling into the river, eroding  
22 into the river and that's why we removed that. So  
23 we did that bank work and the sediment work and we  
24 removed that former Otsego, you know, Dam and now  
25 it's a free flowing section that was left. So we

1 really addressed the bulk of the contamination from  
2 the river with this, this, you know, down this  
3 section of the river with this time critical  
4 removal action.

5                   We did, you know, from the M-89  
6 bring to the former Otsego, you know, Township Dam.  
7 We removed the dam. We created, we stabilized the  
8 banks, created a clean buffer, and we removed the  
9 contaminated sediment. We got it below that .033  
10 number downstream. It's really closer to .33. So  
11 the question then is what's left, right. What  
12 contamination is left after the time critical to  
13 address.

14                   So in the middle there's that M-89  
15 bridge. Downstream we removed that in stream  
16 sediment. We've got a clean buffer along there but  
17 this color that is this blue-ish purple that you  
18 see here, this floodplain area is contaminated and  
19 needs to be addressed as well as some of those  
20 other spots that you see downstream here. So we  
21 have to address this floodplain soil that's  
22 downstream, you know. We need to address that  
23 because it's contaminated.

24                   And then upstream of the M-89  
25 bridge what we have is we have some contamination

1 along the banks. And to kind of give you an idea  
2 of how this is color coded, where you see the black  
3 lines in this upstream area is the black lines show  
4 that there's no contamination upstream and we've  
5 really sampled it and we know it's hard bottom or  
6 the areas are steep banks. You don't really have  
7 an issue.

8                   The blue line, we've got some  
9 samples but not a lot. We need to take a few more  
10 and we think there's some contamination, maybe  
11 about 15 percent. I think there's some along the  
12 bank right in here that we're going to have to  
13 address and, but these pink lines that are here and  
14 all the way along here, you know, here, these pink  
15 lines, those are areas where we're going to have to  
16 do some bank restoration.

17                   We're going reach out, pull the  
18 bank material back, create that 10 foot or more  
19 buffer and then stabilize or restore those banks.  
20 So all the remedies we're looking at upstream, they  
21 are all going to, they are all going to include  
22 this kind of upstream bank remediation work. They  
23 are all going to do that. All the alternatives  
24 we're looking at and the one we're selecting  
25 tonight is going to include this work. All right.

1                   So we looked at five different  
2 alternatives and, in area 3. And area 1 is the no  
3 action or no further action beyond the time  
4 critical removal action and that's required. We  
5 have to do that and then area 5, we've included  
6 this kind of an example in all of all of our  
7 remedies. We've gone through this with area 1 and  
8 area 2 and now area 3. We call it aggressive  
9 excavation and this would be a scenario in which  
10 you basically went bank to bank from upstream to,  
11 you know, from the Otsego City Dam to the former  
12 Otsego Township Dam and basically drudged  
13 everything up along the banks and sediment that was  
14 greater than .33, just kind of a total excavation  
15 across the whole, whole, you know, thing from  
16 there.

17                   That's what we did there and we've  
18 looked at that, that option. The, the other thing  
19 we did is we looked at, so I really want to focus  
20 on these other three options, alternatives 2, 3,  
21 and 4 and, because those are the three that we  
22 really looked at most. The first one is, was a  
23 capping option and, and in this situation for those  
24 floodplain areas we looked at, you know, basically  
25 going and capping those floodplain, you know,

1 options as an alternative.

2                   So the upstream remedy would still  
3 be that bank work but the downstream portion, we'll  
4 be capping those. We looked at that as an  
5 alternative. We also looked at kind of a  
6 combination of capping and excavating and, and that  
7 meant basically what you would do is within 50 foot  
8 of the river so where, where the contamination of  
9 the floodplain is and where we had the time  
10 critical, we would, we would go, take another 50  
11 foot from that time critical and kind of excavate  
12 that area and so do a little bit of excavation like  
13 a 50, increase another 50 foot buffer just adjacent  
14 to the river of excavation and then cap the  
15 remaining portion.

16                   That's kind of what alternative 3  
17 was. So that's kind of a combination of excavation  
18 and capping by excavating an additional 50 foot  
19 buffer in the areas where you had floodplain  
20 contamination. And then area, I mean alternative 4  
21 is basically total excavation of that contaminated  
22 floodplain area along with that upstream bank work  
23 that we talked about. That's what alternative 4  
24 was all about.

25                   So those are the five alternatives



1 we evaluated and really focus on alternatives 2, 3,  
2 and 4 as where we're at and all of these  
3 alternatives 2, 3, and 4 have a few things in  
4 common. We call them common elements, right? So  
5 there's no further action in sight that's time  
6 critical. We're going to go and we're going to,  
7 we're going to monitor that and, and continue to do  
8 sediment sampling and surface water sampling there  
9 and make sure the banks don't erode, you know,  
10 after we issue our record of decision we're going  
11 to do further, you know, sampling, you know, to get  
12 the design. Anything greater than 50 parts per  
13 million is going to, is going to get disposed of at  
14 Itasca Landfill.

15 For Pine Creek, as I said, we  
16 sampled the fish in Pine Creek both in 2013, I  
17 think it was, and then in 2020. And the fish,  
18 particularly the bluegills and the bass in Pine  
19 Creek, those fish tissue levels are actually below  
20 that 0., you know, 42 cleanup number for the fish  
21 although the carp are above it and then the  
22 sediment, the sediment samples, we did sediment  
23 samples back in 2013 and again in 2020 in Pine  
24 Creek and those levels are right at that, you know,  
25 0.3 to 0.4 number so they are really close to that

1 surface weighted average concentration and all  
2 that's there.

3 And so knowing that we believe  
4 we're just going to continue to monitor Pine Creek  
5 and that we don't need to do any excavation or work  
6 in there because the fish are clean and the  
7 sediment's low and we're going to continue to  
8 monitor that. Now, throughout the entire system of  
9 area 3 we're going to do a long-term monitoring and  
10 maintain the banks where we're going to monitor  
11 fish, you know, we're, you know, very regularly.  
12 We're going to monitor surface water. We're going  
13 to monitor sediment and confirm that we've met  
14 those surface weighted average concentrations, the  
15 fish tissues are moving down.

16 And for all of these alternatives  
17 it's going to take some 33 years for the fish  
18 tissue to kind of get to that cleanup level that we  
19 need to. So all, all the alternatives have these  
20 common elements to them that we have. Now, when  
21 EPA evaluates these alternatives we look, we have a  
22 group of criteria we look at and we call these kind  
23 of nine evaluation criteria.

24 The first two, protection of human  
25 health and environment and kind of compliance with

1 applicable and relevant appropriate requirements,  
2 really kind of the laws or some type of relevant  
3 requirement out there. Those are the threshold  
4 criteria and all the alternatives have to meet  
5 that. And certainly alternatives 2, 3, and 4, they  
6 all meet those threshold criteria.

7           Then we looked at a series of  
8 balancing criteria, you know, how implementable are  
9 the alternatives? You know, are they long-term  
10 effective? Are they short-term effective? We do  
11 have a preference for treatment and then are they  
12 cost effective? We look into all those balancing  
13 criteria when we try to evaluate the various  
14 alternatives that are out there.

15           And then the last two criteria,  
16 state and community acceptance, that's one of the  
17 purposes of having this, this call, or this  
18 meeting. And then getting comments is we want  
19 community comments on this. We want to find out  
20 what people think. We can change RODs or change  
21 decisions based on community comments and from the  
22 state as well. The state's supportive of our  
23 alternatives. In looking in this, we work with the  
24 State of Michigan and the trustees towards this  
25 alternative and they have been involved with us on

1 this so they know what this is and where we're  
2 moving forward with this so they are very  
3 supportive about it as well.

4 Here's a little chart. It's  
5 difficult to look at, you know, here but I just  
6 want to point out that, you know, a couple things.  
7 Basically alternatives 2, 3, and 4, they are all  
8 relatively similar. They are all going to take  
9 about 33 years to reach that preliminary  
10 remediation goal for the fish because they just, it  
11 takes a long time for fish to kind of recover even  
12 when you clean up the system, it's there. And, and  
13 there's some work to still be done in some of the  
14 upstream areas as well but there, and all these  
15 alternatives are readily implementable and they all  
16 are going to take about two years to physically  
17 implement.

18 So no matter which of these  
19 alternatives we choose, they are all about two  
20 year, two field seasons for sure, maybe two and a  
21 half field seasons to get all this work done. So  
22 to cut to the chase, I guess EPA's preferred  
23 alternative is alternative 4 which is excavation of  
24 the floodplain soil. So what we're proposing to do  
25 is excavate some 58,500 cubic yards, about 18 acres

1 of floodplain soil downstream of the M-89 bridge.

2           The upstream section will do that  
3 bank restoration that I showed you and I'll show  
4 you another figure of that. The total cost is  
5 approximately \$33.4 million to implement this  
6 remedy, this excavation remedy and we believe it's  
7 really a good balance of all of the various  
8 criteria and the fact that by removing this  
9 material we're not going to have to monitor any  
10 caps. We're going to still get that connectivity  
11 between the floodplains and the river itself and we  
12 believe it's, you know, it's a really good and  
13 well-balanced alternative.

14           This is the upstream area, just to  
15 show you this figure again. This is where we would  
16 be doing the pink areas, where we'd be doing the  
17 bank restoration along there where we're going to  
18 reach in. We're going to, we're going to, you  
19 know, reach into the tow of the bank, pull the  
20 material back, make sure it's all clean, create at  
21 least a 10 foot buffer. More than likely with the  
22 3 to 1 slope the buffer would be about 25 feet and  
23 we'll have more of a natural restoration just like  
24 we had downstream. That's what that would look  
25 like.

1                   And, again, just to kind of  
2   summarize some of the elements, you know, it's,  
3   we're going to be doing remedial design sampling to  
4   kind of, to basically ensure what that footprint  
5   looks like and we're going excavate those areas.  
6   We're going to ship that material offsite to  
7   permitted landfills for disposal for Pine Creek.  
8   We're looking at monitored natural recovery. We're  
9   going to continue to monitor that and, again, I  
10   just have to stress the importance of area wide  
11   within area 3 we're going to have a long-term  
12   monitoring plan and it's included in part of this  
13   cost and that will go on for a minimum 33 years or  
14   until those cleanup levels are met.

15                   And we're going to be looking at  
16   making sure the banks don't erode. We're going to  
17   be monitoring the fish tissue and we're going to be  
18   monitoring sediment and we're going to be  
19   monitoring surface water to ensure those fish  
20   tissue levels are going down as projected and that  
21   the banks aren't eroding from there. And, as I  
22   said, this is a project that would take two years  
23   ultimately to implement once they get on there  
24   starting with the cost of approximately \$33.4  
25   million.

1                   So our next steps, we're going to  
2 take some comments and questions tonight and we'll  
3 incorporate those comments either that  
4 responsiveness summary and then, you know, we're  
5 going to take them and that will be an attachment  
6 of to the record of decision which hopefully our  
7 plan will get, you know, issued sometime, you know,  
8 this fall. So I think with that, Diane, I will  
9 turn that back over to you and we can go from  
10 there.

11                   MS. RUSSELL: Awesome. Thank you,  
12 Jim.

13                   MR. SARIC: And I'll hit this stop  
14 sharing button, how about that?

15                   MS. RUSSELL: Yeah. And, Meg, if  
16 you can scroll back up to the slides we had because  
17 we can go through some of the construction and how  
18 folks can ask some questions, not that one, the  
19 next, the one prior to that. Great. So Jim just  
20 shared with you several slides that I want to make  
21 sure that everyone knows will be available on our  
22 website for review as well after this meeting.

23                   So if there's something you wanted  
24 to go back and look at as we're in this comment  
25 period, those will be on our website. And this is,

1 right now is your opportunity to ask a question and  
2 get a response because later on in the meeting  
3 we're going to be doing the formal comment period  
4 and that's where if you have a question at that  
5 point, we will not be responding because we're,  
6 we're having that be the formal comment where the  
7 court reporter will take comments that people  
8 submit and we will respond to that later in a  
9 responsiveness summary.

10 So now is the time to ask your  
11 question and I'll go through a couple of ways that  
12 you can do that. For those of you on the computer,  
13 you can type a question in the chat box and we  
14 will, I will call on you and/or read off your  
15 question and then Jim can answer it so that's one  
16 way to do that. You can also virtually raise your  
17 hand. You go on the bottom of the screen. There's  
18 a participant icon.

19 You open that and towards the  
20 bottom of that window there should be a raise your  
21 hand or if you go next to your name there should be  
22 an option to raise your hand and we will also call  
23 on you there. For those of you on the phone, you  
24 can hit star 9 and that will let us know that you  
25 have a question and then we will call on you to ask



1 your question. And to unmute and mute your line on  
2 the phone you have to hit star 6. So just wanted  
3 to, I will leave these instructions on the screen  
4 for those of you who can see on the screen but,  
5 again, for those of you on the phone, hit star 9  
6 and let us know that you have a question and we'll,  
7 we'll get to you in order that we can.

8 And I will get started right now.  
9 Andy Webb online, I see that you have you question.  
10 Your hand is raised do you want to go ahead and ask  
11 your question?

12 MR. WEBB: Yeah. I am, as Jim and  
13 Paul and you may be aware, we live directly across  
14 on the largest part of where you'll be doing the  
15 cleanup and I didn't see any pink really on our  
16 side of the river and was curious if there were any  
17 plans to do any work on the, on the left bank and  
18 basically directly behind our house?

19 MR. SARIC: So there are, so I'm  
20 just going just, so we're talking, just to make  
21 sure, Andy, I'm correct, it's downstream of the  
22 M-89 bridge across from, there are a few, there  
23 were a few little purple-ish, you know, blueish  
24 blobs that were there that were shown on that, in  
25 that figure that there are some areas that were

1 going, that based on the sampling we're going to,  
2 you know, further check out.

3 But upstream, now upstream of the  
4 M-89 bridge that bank work, you know, is really  
5 those pink line and then where the blue, the  
6 sampling of the blue line is primarily --

7 MR. WEBB: Right. I'm downstream  
8 and, I mean, from the river, we're the large green  
9 house --

10 MR. SARIC: Okay. Gotcha. I know  
11 where you're at now.

12 MR. WEBB: Great. That makes it  
13 easy. So, yeah, I just, I didn't see anything  
14 directly behind our house. I know some of the,  
15 some of the riverside edge of our yard even now I  
16 see, you know, trash and junk that kind of works  
17 its way up out of the ground, just from, you know,  
18 because the water's edge used to be at the back  
19 edge of our yard. And I wondered if there was any,  
20 if there were any plans to do anything in, at this  
21 particular part?

22 MR. SARIC: Well, I mean, you  
23 know, the samples, like I said, we've had a bunch  
24 of samplings throughout the floodplain and we're  
25 going to do some more remedial sampling post, you

1 know, post ROD, more remedial design sampling;  
2 however, you know, we do have a pretty good handle  
3 over where a lot of that contamination was. So  
4 where you really didn't see that, kind of that  
5 blue-ish purple-ish color, we really don't have  
6 much.

7                   And, again, you know, part of it  
8 is, you know, like I said, they, a lot, they did  
9 that, that pull back along the river and pulled  
10 back and got a lot of contamination, was closer to  
11 the river itself along there. But on that right  
12 descending bank downstream that floodplain was much  
13 more extensive, had been flooded much more  
14 frequently when the dam was higher and that's why  
15 it was actually almost like an old remnant side  
16 channel, if you will, and that's why you've got  
17 much more contamination among that right descending  
18 bank than the left descending bank.

19                   MR. WEBB: Yeah. One other piece  
20 on the left descending bank behind our house,  
21 there's, there's kind of, you had to install the  
22 haul road there. Are there any plans to remove  
23 that in the future?

24                   MR. SARIC: Yes. Those will get  
25 removed, you bet. Those will. I mean, I think

1 that part of the idea is to leave some of them  
2 there in case they may be used but they are all,  
3 they are going to be removed, you bet. And I think  
4 we work with the DNR and what they wanted. I know  
5 the DNR, ultimately I think they would like them  
6 removed from there and so I think that more than  
7 likely they are going to be removed but I think  
8 they don't want to go do that now until we figure  
9 out could that be helpful for getting equipment in  
10 to remove other materials or not, so --

11 MR. WEBB: Sure. Yeah. And that,  
12 that makes sense to leave it there. I just, we've,  
13 we've lived here on this parcel since about 1995  
14 and, and since the haul road was put in, and I know  
15 you guys have made some efforts to, to improve the  
16 drainage because the haul road was, was kind of  
17 capturing water behind it. And we had more, I know  
18 it's bad this year anyway but I think we've seen  
19 some more mosquito issues just because of stagnant  
20 water that got, kind of got trapped behind the haul  
21 road so I think that will help, assuming that gets  
22 taken out, I think that will help the drainage get  
23 the rest of the way to the river so, okay. Those  
24 are my two main questions.

25 MS. RUSSELL: Thank you --

1 MR. SARIC: Thank you.

2 MS. RUSSELL: Yeah. And I guess I  
3 just wanted to tie into that because Sandy just  
4 wrote something similar to Andy's because she lives  
5 on the south side of the river but original water  
6 flow came much farther up than 50 feet and she was  
7 wondering if you plan to work on that, too, and  
8 commenting that she lived there since '67 so just  
9 to tie in with Andy's.

10 MR. SARIC: Well, I think, you  
11 know, I think we're going to continue to kind of  
12 look, you know, I mean, the banks themselves, we've  
13 done that work. We're going to, we're certainly  
14 going to look at how we're going to remove some of  
15 the materials in the floodplain and think about  
16 that, that kind of activity, you know, there's that  
17 fine line, you know. You want to make sure that,  
18 that in high water areas that some of the water can  
19 kind of dissipate and get up into the floodplain  
20 because that's actually helpful for some of the  
21 ecological receptors that are there but certainly  
22 people don't want to have their backyards and  
23 houses flooded so it's kind of that, you know, it's  
24 little, little, you know, kind of a balance that's  
25 there and I like to work with those from the DNR

1 and the National Resource Trustees and the  
2 representative from the state who could help kind  
3 of work towards what's that best design that goes,  
4 goes forward there.

5 And then ultimately, you know,  
6 that Otsego City Dam upstream is going to be  
7 removed as part of the area 2 restoration so it may  
8 ultimately change some of that water movement  
9 through there. We've modeled some of that and  
10 looked at it as well. So I guess the long answer  
11 to your short, your short question was, yeah.  
12 We're working it and it's all going to be kind of  
13 part of the design form there.

14 MS. RUSSELL: All right. Tom had  
15 a question, also, we'll stay with the chat for a  
16 moment. What will be done to eliminate sedimentary  
17 deposits from flowing downstream?

18 MR. SARIC: Yeah. I think that  
19 that's another excellent question. So as far as  
20 the downstream migration, so in, you know, where,  
21 you know, from like in area 3 downstream of the  
22 M-89 bridge, you know, we have those banks  
23 stabilized and that's, you know, that's, you know,  
24 we're not going to have contamination moving from  
25 there. Upstream when we do that restoration

1 upstream the M-89 bridge we'll get that stabilized,  
2 and so we won't have contaminated bank material  
3 that's going to be moving through the system in  
4 area 3 when we get that work done.

5                   Now, one of the things that  
6 happened throughout this whole river is as you  
7 remove dams and you do it, you know, you have  
8 sediment that moves from upstream to downstream.  
9 It's what we call dynamic equilibrium where you  
10 have storm events that come in and they move  
11 sediment from one area to the next and that's going  
12 to go on. It's not all contaminated. In many  
13 areas it's cleaner sand that gets moved through.

14                   So, you know, I think that by the  
15 whole concept that we've been doing a lot of these  
16 areas is to stabilize the banks and create this  
17 clean buffer between, you know, you know, the  
18 river, that river banks and the floodplain and then  
19 by removing the in stream sediment contamination  
20 with the areas of higher contamination, by doing  
21 that and stabilizing, you know, removing the  
22 contamination, stabilizing the banks you're going  
23 to prevent that kind of downstream contaminate  
24 movement that's there. And, you know, and part of  
25 that also is you're handling those earlier sources

1 from the landfills and the paper mills and address  
2 those. So it's a multi-phase, multi-step process  
3 but we're getting there stabilizing the banks.

4 MS. RUSSELL: Okay. Thanks, Jim.  
5 I want to go into the caller with the last digits  
6 4120. Your hand is raised if you'd like to ask  
7 your question.

8 MR. DUGAN: Thank you. Can you  
9 hear me okay?

10 MS. RUSSELL: Yes.

11 MR. SARIC: Yeah.

12 MR. DUGAN: This is Gale Dugan of  
13 Otsego Township. I have three questions for Jim or  
14 for you, Diane. In the presentation you said that  
15 the average depth was 3.8 feet depth. That's in  
16 normal flow, not during a flood event?

17 MR. SARIC: Yeah. And, again,  
18 it's across a 3, 3 and a half mile stretch, right?  
19 So, you know, I mean, I think it averages out  
20 because, you know, like upstream area normal flow,  
21 you know, that, that water in many cases is less  
22 than a couple feet in some of the those areas,  
23 right? You know, you hit bottom with your boat or  
24 whatever that's there and then it's deeper, it's  
25 significantly deeper downstream than some of the



1 other areas. So just a ballpark. That's all that  
2 was meant to show.

3 MR. DUGAN: In modeling with  
4 taking in consideration the reconfiguration of the  
5 river and area 2 which is below, above these Otsego  
6 City Dam, if we were to have a 100 year storm what  
7 effects are, or to the depth of water flowing to  
8 area 3, is that then to continually on a usual  
9 regular basis in a storm event such as that  
10 magnitude or less than that flood those floodplains  
11 that we're planning on building and preserving  
12 through planting the natural trees and bushes and  
13 mother nature taking back over that site or is that  
14 going to be more contained to the channel with the  
15 flood walls taking the brunt of the experience of  
16 the water?

17 MR. SARIC: Well, I mean,  
18 obviously, you know, 100 year flood event is pretty  
19 significant, right? So, you know, the restoration,  
20 kind of channel design restoration features, you  
21 know, are going to be able to handle some of the  
22 that certainly. Now, there could be some erosion  
23 that, from some of the, you know, few areas that  
24 comes from that depending on how the timing of an  
25 event like that and then when it would, you know,

1    how well established some of the plants or  
2    vegetation was. You know, we have, we put in  
3    downstream of the M-89 bridge, you can see in the  
4    little water, there's a couple rock structures that  
5    are called J hooks that kind of focus the energy of  
6    the channel for like higher flood events to the  
7    center of the channel purposefully.

8                    And I think that that's going to  
9    help handle some of that flood, you know, the  
10   energy coming from 100 year flood event to take it  
11   off the banks and have it centered down the  
12   channel; however, when you do get an event like  
13   that you will have some water obviously coming up  
14   in the floodplain. That's part of the design as  
15   well. I mean, what we've tried to avoid when we're  
16   removing dams and then thinking about how wide the  
17   channel needs to be in the banks is basically the  
18   idea of, okay, on a big storm event you're just  
19   going to have water just roll, either race through  
20   from upstream to downstream without getting up the  
21   floodplain.

22                    You really don't want that to  
23   happen. You have to dissipate some of that energy  
24   because that's kind of the way the rivers naturally  
25   progress and you don't have want to have, you know,

1 just, you know, move tremendous volumes of water  
2 rapidly from one section to the next to kind of  
3 potentially flood a downstream area.

4 MR. DUGAN: Thank you very much,  
5 Jim. My last question is about the institutional  
6 controls that you would like to see instituted from  
7 the EPA's point of view of the institution  
8 controls, should that be promulgated from the  
9 township level during the, in the planning  
10 commission or should it be promulgated by FEMA as  
11 to the floodplains that have been adopted for this  
12 section of the river and in Otsego Township or  
13 should this be a county of endeavor to put those  
14 institutional controls in or would you like to see  
15 the state step in?

16 MR. SARIC: Excellent question.  
17 Yeah. So a part of it all depends on who the  
18 landowner is, right? I would think that, for  
19 example, in land owned by the state, state-owned  
20 property and its recreational land we're going to  
21 have some type of insurance or a deed restriction  
22 or some kind of document that would say, this is  
23 going to be recreational land use. And then that  
24 might be, that document might be on, you know, held  
25 in the county level or, you know, or the township

1 level where they've got that document that says,  
2 hey, this lands needs to be kept recreationally.  
3 And from there if there's property that the city  
4 owns, might do the same thing where they have a  
5 deed restriction there or they have some, you know,  
6 notice that's on the deed for, this is what this  
7 property needs to be from there.

8                   Some of it's residential already  
9 and that can be maintained as residential from  
10 there. So that's kind of what we're thinking from  
11 that. You know, those are certain legal documents  
12 that we'll move forward with and work with the land  
13 owners and, you know, whether that be a resident,  
14 whether that be, you know, Otsego City or whether  
15 it be the state will work through to figure out  
16 what's the best approach for that given the future  
17 land use.

18                   MR. DUGAN: Thank you very much.  
19 And one comment, you did a very good presentation  
20 tonight, Jim. And I appreciate your efforts and  
21 your work and your dedication to this project.  
22 Thank you very much.

23                   MR. SARIC: Thank you.

24                   MS. RUSSELL: Thanks, Gale. Hi,  
25 Jason. You have your hand up. We are ready to

1 take your question.

2 MR. CASSAR: Hi. Thank you. I  
3 was curious what you guys have taken into  
4 consideration with the Morrow Lake Dam sediment  
5 that's been propagating down river? I think  
6 there's an estimated 360,000 cubic yards of  
7 sediment that's been building up and, and impacting  
8 various residents across the river and as we see  
9 more rainfall coming it's continuing to build up  
10 and make its way further downstream.

11 Given that massive amount of  
12 sediment that's made it into the river, I'm curious  
13 how you're factoring that into the equation to keep  
14 it from going further downstream as well as get it  
15 out of there?

16 MR. SARIC: Yeah. No. Jason, I  
17 understand your question and I know that there is a  
18 large volume of sediment that, that moved  
19 downstream. You know, in our Superfund Program  
20 we're really focused on the risk from the PCBs and  
21 fortunately a lot of the data from the samples that  
22 have been collected and, both from Morrow Lake  
23 historically and everything that had very low  
24 levels of, you know, you know, if any low levels of  
25 PCB contamination.

1                   So I think from a contamination  
2 standpoint and am increasing fish tissue  
3 concentration we don't see and I don't see this  
4 being a huge issue at that point. From an overall  
5 sedimentation problem in, you know, in areas where  
6 we're planning on doing sediment, in stream  
7 sediment remediation and cleanup, that it becomes a  
8 bigger issue because it's more volume and material  
9 to deal with like upstream in area 1, for example,  
10 next year we're going to be doing some excavations  
11 and it has increased the volume of material that  
12 we're going to have to excavate out of the river  
13 and handle from there.

14                   But in this area and specifically  
15 in area 3 it's not. I think we're going to monitor  
16 the banks. We're going to, again, continue to  
17 sample as part of the long term monitoring the fish  
18 and the sediment and the surface water and so by  
19 doing sediment sampling even within these areas  
20 long term we're going to see if there were any  
21 impacts potentially from this or if it, if it  
22 changes that surface weighted average  
23 concentration.

24                   So I know we're going to go  
25 long-term monitoring, you know, from there but

1 we're not planning on doing any specific excavation  
2 in, within area 3 that's driven based upon the  
3 Morrow Dam site.

4 MR. CASSAR: So following on that  
5 question, I mean, is there talks about joining  
6 forces or putting in like a turbidity curtain in to  
7 stop the, the sediment from Morrow Lakes making it  
8 downstream any further? If you guys are going to  
9 be there in area 3 anyhow wouldn't it make sense to  
10 somehow join forces with EGLE, get a turbidity  
11 curtain put in to stop further sediment buildup  
12 going down to areas 4, 5, and 6 where you're, by  
13 then I worry you're going to run out of money.

14 MR. SARIC: Yeah. No. I  
15 understand, I understand the issue from that for  
16 sure. And I think that, you know, we will be using  
17 some turbidity curtains when we go through, when we  
18 go and do some of the bank work, you know. I know  
19 that the EGLE is working with, you know, the SDS  
20 and the former, you know, the dam operator up there  
21 and on one of the next steps and so we're kind of  
22 keeping in touch and we're certainly willing to  
23 calibrate them and help with it to kind of stop  
24 that downward, you know, trend as best we can.

25 But, but currently right now I

1 know EGLE is working directly with them and kind of  
2 has the lead on what to do with the Morrow Lake  
3 aspect of it. But, but I fully understand, you  
4 know, we don't operate in a vacuum, you know,  
5 Jason. And that we need to work with them on that  
6 and figure out how we're going to coordinate these  
7 things and we are.

8 I guess for area 3 specifically I  
9 don't have the answer right now of what's going,  
10 you know, what we're going to do there and, and I  
11 know that part of that is just some of the  
12 discussions that are going on between the state  
13 and, you know, the group up at the Morrow Dam right  
14 now.

15 MR. CASSAR: Is that something  
16 that can be captured as a request when you go  
17 through and do your final proposal is to put some  
18 form of a two year sediment, two year turbidity  
19 curtain in across the flow of the river so it at  
20 least stops that progression of sediment? Because  
21 I'm not far from Lake Allegan. I'm probably a  
22 couple miles upstream of Lake Allegan, obviously  
23 passed the Dam. And I can tell you from we are at,  
24 we're seeing, we're seeing the sediment. It's  
25 coming through the water almost like talcum powder



1 or drywall dust.

2 And it's sitting in spots it's  
3 creating almost a paste-like substance that if it  
4 could be stopped upstream while you guys are doing  
5 what you're doing already, it seems like it would  
6 make a lot more financial sense for both EGLE,  
7 Morrow Lake, and the EPA to stop it in its tracks.

8 MR. SARIC: Well, certainly,  
9 Jason, I'm sure Diane will just, you know, tell you  
10 this that we'll, you know, when we're done with  
11 these informal questions if you want to make that a  
12 formal comment, you know, I certainly encourage you  
13 to do that.

14 MS. RUSSELL: That, yep.

15 MR. CASSAR: Okay.

16 MS. RUSSELL: One thing at this  
17 point out in the chat Andy Webb is wearing his  
18 planning commission hat and made a note that Otsego  
19 Township does have a prospective towns and river  
20 overlay district in the management plan and they,  
21 he was just noting that they welcome public input  
22 on that process of documentation. So just pointing  
23 everyone into the chat for that little note by,  
24 from Andy Webb.

25 MR. SARIC: And, Diane, I'd like

1 to let people know that we are going to, as we get  
2 through the design we'll be definitely coordinating  
3 with the city both in the upstream end of area 3  
4 here and then the downstream end of area 2 to make  
5 sure it all, best we can to make sure it all kind  
6 of works together and fits together.

7 MS. RUSSELL: Coordination is a  
8 very important part of the project, absolutely. So  
9 I wanted to, again, just remind folks right now is  
10 the time to, if you have a question that you would  
11 like an answer to today, now's the time to ask it.  
12 If you have, if you pose a question in this next  
13 part of the meeting where we're taking formal  
14 comments, we're not able to respond in that moment.

15 What we end up doing for those  
16 formal comments that come in tonight that come in  
17 via mail or through the web, we collect those  
18 throughout the comment period which ends August  
19 6th. And when that ends, then we will collect all  
20 the comments together and respond to them in what  
21 we call a responsiveness summary and we'll provide  
22 answers at that time and that document that will be  
23 made available to the public.

24 So, again, you can submit comments  
25 tonight. You can wait and submit that via mail.

1 You can go to our website and get that address.  
2 And if you'd like it now, it's 1300 Bluff Street,  
3 Suite 140, Flint, Michigan 48504. Those come to  
4 me. I will collect those and make sure they get  
5 into Jim's hands.

6 So, again, if there's any  
7 questions, feel free to type something in the chat  
8 box or raise your hand virtually if you're on the  
9 computer. You can also, if you're on the phone  
10 raise your hand by hitting star 9. That will let  
11 me know that you are looking to ask a question. I  
12 see Tom. He's raising his hand in the video so  
13 that's also another way. Tom, did you have a  
14 question? Not on mute, is that the issue?

15 MR. HARDIN: I do. Can you hear  
16 me now?

17 MS. RUSSELL: I can hear you.

18 MR. SARIC: Yes.

19 MR. HARDIN: Just like Verizon  
20 said. The reason I asked a question about the  
21 sediment is because we live kind of catty-corner on  
22 the north side of the river across from the state,  
23 from the county fairgrounds. Two years ago when  
24 you were doing the work in Otsego there were days  
25 where the channel, the channel is very well defined

1 in front of our house. There's a long straightaway  
2 and there were days when the channel was filled  
3 with sediment and this had nothing to do with the  
4 Morrow Dam. It had to be connected with the  
5 drudging that was being done in Otsego.

6 The Kalamazoo River is never very  
7 clear, as you know, but on many days the river was  
8 as clear as it normally would be except for all of  
9 the sediment flowing down the channel. So I asked  
10 a question because apparently something more needs  
11 to be done than was done before.

12 MR. SARIC: Yeah. I understand  
13 that, Tom. I know they, like I said, when they did  
14 the time critical and typically when we do any  
15 excavation work, you know, we usually go to quite a  
16 few steps where we put curtains around them. We've  
17 done sheet piling around the bank and then, you  
18 know, to kind of, and then do everything we can to  
19 isolate the area to kind of prevent that downstream  
20 movement of sediment.

21 And then we actually have  
22 turbidity monitors where we monitor the turbidity  
23 upstream and do the best we can. That doesn't mean  
24 something couldn't have happened, you know, I  
25 couldn't think of those specific examples, you

1 know, from there but obviously you saw hints of  
2 turbidity and sediment movement from there, you  
3 know. I can assure you that we have people onsite  
4 when the work actually gets done, particularly that  
5 area upstream from the M-89 bridge do that bank  
6 work to ensure that, that that sediment doesn't  
7 get, you know, from the bank, doesn't get moved  
8 downstream when we do that work, you know, kind of  
9 the tow of the bank or in stream of the tow down  
10 there. And so that's, you know, that's part of  
11 that design. I know it's faster moving so we're  
12 going to have to work, work hard to make sure that  
13 doesn't happen in the future.

14 MS. RUSSELL: Any other follow-up,  
15 Tom? No? Got it. Okay. I'll just point to the  
16 chat.

17 MR. HARDIN: I guess that's the  
18 most I can ask for.

19 MS. RUSSELL: What's that?

20 MR. HARDIN: I said, I guess  
21 that's the most I can ask for. Where we live, we  
22 are getting landlocked by a mud island and the mud  
23 island I think is quite a bit responsible for the  
24 Morrow Dam that it began building several years ago  
25 when the EPA was working upstream. And I'm just

1 concerned that's all it's going to do is get worse  
2 and worse.

3 MR. SARIC: I understand.

4 MS. RUSSELL: Thank you, Tom. One  
5 point of, in the chat Sandy wanted to know if  
6 there's any chance that there's going to be more  
7 trees planted on the north side of the river that's  
8 downstream from the M-89 bridge? She's commenting  
9 a lot of road noise now that those former trees  
10 were taken out, just wanted to know if you've given  
11 that any thought at this stage of the game?

12 MR. SARIC: You know, at this  
13 point I can't answer what trees will get planted  
14 and whatnot. I can tell you that certainly when  
15 they did some of the, you know, the time critical  
16 they planted some trees that are slowly growing and  
17 then, but we're going to work, as we've done in the  
18 past, when we do that, the excavation up on the  
19 floodplain, you know, on that, on the north side  
20 river they were going to do a bunch of that.

21 They're, I'm sure we'll be working  
22 with the DNR for what's the, what trees should be  
23 planted and what the natural vegetation, you know,  
24 really working with the trustees and the other  
25 experts that know better than I do when it comes to

1 doing that restoration. We're going to kind of  
2 coordinate with them. So I'm sure there will be  
3 some. I don't know how much and I don't know what  
4 type and the density but we will work with the DNR,  
5 the state, and the other trustees on that.

6 MS. RUSSELL: All right. We're  
7 addressing that question. Any other questions  
8 before we move to the formal comment portion of the  
9 meeting? Now's the time to ask but, if not, what  
10 we'll end up doing is we will take a moment and  
11 then we'll move into the formal comment portion of  
12 this.

13 And, again, I'm just going to make  
14 one last call if there's any questions that you  
15 wanted answered right now before we move into that  
16 phase. I will go ahead and deliver some  
17 instructions on that as we, as we wait for any  
18 last, last minute, last-minute questions. Meg, we  
19 can go ahead and, let's go to the next slide. I  
20 just want to go over just a few, and then again,  
21 like I said, after I deliver these, if you want to  
22 formulate your game plan in a few moments and then  
23 I'll let you know when we'll start the formal  
24 comment period.

25 And just like we did with the

1 questions you're going to need to indicate if you  
2 would like to submit one by raising your hand via  
3 the phone or on the computer and/or typing  
4 something in the chat box and then I'll call on  
5 you. And at that time we have a court reporter and  
6 the court reporter is going to take your, your  
7 name.

8 First and last name's okay but if  
9 you only want to provide your first name that is  
10 perfectly all right as well but it's just for the  
11 record just so we know that there's a human  
12 associated with that. And, again, you know, just  
13 try to keep it so it's not over five minutes is  
14 what we're asking.

15 But if this isn't your, the format  
16 you'd like to use always remember that you can  
17 submit those online or send them in the mail to me  
18 but make sure that they are, if you send them in  
19 the mail they need to be postmarked by August 6th  
20 so, just so you know that as well. And, again,  
21 when we get to the formal comment portion we're not  
22 going to be responding if there's questions or  
23 statements that sound like they might need a  
24 response at that moment.

25 No disrespect. We're just not



1 going to be able to comment at that, at that time.

2 So I'm going to take, I'm going to leave this slide  
3 up for just a few moments and I'm going to turn off  
4 my camera for a moment and when I come back then  
5 we'll go ahead and start the --

6 MS. MOOSA: Diane? Diane?

7 MS. RUSSELL: Yes.

8 MS. MOOSA: Dan Burton had one  
9 more question on --

10 MS. RUSSELL: Oh, great. Thank  
11 you for pointing that out. He just wanted to know  
12 if there's any formal mussel studies conducted in  
13 area 3 and how that impact, how the work impact  
14 them.

15 MR. SARIC: There were mussel  
16 studies done and there was mussel relocation that  
17 went on during the time critical for sure. So  
18 that, I'm, I'm not sure what will be done post ROD  
19 particularly for the upstream area. I'm sure there  
20 will probably be some, again, be coordinating with  
21 the state regarding that to see what, you know,  
22 what mussels are around the areas.

23 We may have to, you know, excavate  
24 in those banks. But downstream we did do, again,  
25 there was work. There was relocation of mussels

1 that went on and, from there so they surveyed them  
2 and they relocated quite a few of them but I don't  
3 know exactly what's going to happen, you know.  
4 That would probably be probably part of the design  
5 part for upstream what we're going to need to do  
6 there.

7 MS. RUSSELL: Great. Thanks, Jim.  
8 Any other questions? Feel free to raise your hand,  
9 type it in the chat. And we're, again, just take  
10 a, take a moment to thank you all for participating  
11 in this tonight. It's really important, especially  
12 this, you know, EPA is full of process as  
13 prescribed by the law and seem very formal and  
14 sometimes things don't seem to connect but these  
15 portions of, of us asking for public comment is  
16 really an important component to our decision  
17 making.

18 I know we heard from a lot of  
19 people, doesn't always feel that way but just do  
20 know that this process and you joining us tonight  
21 really does help EPA make better decisions in  
22 moving forward with this cleanup on the Kalamazoo  
23 River. So not seeing any hands or additional  
24 comments in the chat we'll just take just a few  
25 moments and then we will move on to the formal

1 portion of the meeting and if anyone is interested  
2 in submitting their comments at that time, we will  
3 take those.

4 So we'll just take, again, like a  
5 few moments. I'll come back on camera and that  
6 will show that that's the start of the formal  
7 comment. So we'll return.

8 (WHEREUPON, a recess was taken.)

9 MS. RUSSELL: All right. Thank  
10 you for your patience on that. I just wanted to  
11 make sure everyone had enough time to collect  
12 themselves as we go into this next portion of the  
13 meeting which is the formal comment period. And  
14 this is where we're going to be collecting your  
15 formal comments for the record and those will be  
16 recorded by our court reporter and submitted with  
17 the rest of the comments that we receive during  
18 this comment period which concludes August 6th.

19 So if you would like to submit a  
20 comment tonight you can indicate that by either  
21 raising your hand or typing in the chat letting me  
22 know that you would like to submit a comment and I  
23 will call on you in order, in order for you to  
24 submit that, that formal comment. If this is not  
25 your cup of tea to do it in this format, please

1 know that you can go to our website and there is a  
2 form online you can click on and it gives you a  
3 form you can fill out and that will be directed  
4 towards me.

5                   You can also submit those comments  
6 by mail. As long as it's postmarked by August 6th  
7 those will be put into the record. Again, those  
8 comments can be sent to Diane Russell at 1300 Bluff  
9 Street, Suite 140, Flint, Michigan 48504. So with  
10 that, I'm going to go ahead and give the floor to  
11 Jason. Again, please state your name for the court  
12 reporter so that can be recorded. Jason, go ahead.

13                   MR. CASSAR: Sure thing. My name  
14 is Jason Cassar spelled, last name, C-A-S-S-A-R.  
15 And I would like to, as my comment I would like see  
16 in the proposal for area 3 the inclusion of a type  
17 3 or better sediment curtains to prevent further  
18 leakage of both the contaminated soil that the EPA  
19 is going after as well as the Morrow Lake Dam soil  
20 that has been released into the river as well as a  
21 reference of how the EPA and the EGLE are going to  
22 join efforts to ensure that the additional  
23 sediments do not further leak past area 3 and  
24 impact residents of areas 4, 5, and 6.

25                   MS. RUSSELL: Great. Thank you,

1 Jason.

2 MR. CASSAR: Thank you.

3 MS. RUSSELL: I am not seeing any  
4 hands raised in our participant list tonight, still  
5 have not seen anything added to the chat. Was  
6 there, I'm going to go ahead and make another call  
7 for any formal comments that they would, folks  
8 would like to submit at this time. You can, again,  
9 I just want to remind you if you're on the phone  
10 line and need to raise your hand you can hit star  
11 9. That lets me know that you're ready to submit a  
12 comment. And then to mute and unmute your line you  
13 hit star 6 on the telephone.

14 So if there's anyone on the phone  
15 who would like to submit a comment you can hit star  
16 9 and that will let me know that you are next and  
17 we'll take a moment for that. Again, going back to  
18 the chat, anyone wanted to submit a comment there  
19 or indicate that they would like to submit a verbal  
20 comment you can type that there. And just take a  
21 moment and allow anyone who's interested in doing  
22 so submit a comment in this format. Gale, I  
23 believe that is you who has raised your hand. If  
24 you would like to, go ahead.

25 MR. DUGAN: Thank you, Diane. Can

1 you hear me okay?

2 MS. RUSSELL: I can. Make sure  
3 you state your name for the court reporter.

4 MR. DUGAN: Yes. My name is Gail  
5 Dugan. I am an Allegan County Commissioner of  
6 District 6 which includes Otsego Township in the  
7 area of concern. I believe at this time that the  
8 EPA alternative number 4 is the most strategic  
9 long-term fix for this part of the river. Looking  
10 at any other concerns past that such as Pine Creek  
11 I believe that it should be additional work there  
12 in the northwest corner of that to substantiate the  
13 concentrations of PCBs in that depth because it is  
14 known that there is some there.

15 To monitor that is a good step  
16 forward but additional testing should be done in  
17 Pine Creek in that northwest corner of the rest of  
18 the program that the fixing of the banks and  
19 removing that I believe the alternative number 4 is  
20 the best alternative for the long-term health and  
21 benefit and the usage for recreational purposes and  
22 for the entire county at this time. Thank you very  
23 much.

24 MS. RUSSELL: Thank you. Thank  
25 you for your comment. I'm going to, if we can open

1 it for anyone who wanted to unmute and provide a  
2 comment if this is, this is a good time to do so.  
3 I'll take a few moments for that in case anyone  
4 wanted to take the time to submit a comment now and  
5 we are taking comments through August 6th. So if  
6 tonight is not your night, you have until August  
7 6th to take a look at the documents we have on our  
8 website. We have a fax sheet. We have the full  
9 proposed plan on the website as well for review and  
10 you have time to look at that and if you had any  
11 follow-up questions, of course, you can reach out  
12 to Jim or myself.

13                   You can reach me, Diane Russell,  
14 russell.diane@epa.gov. And certainly if you have  
15 questions we can answer those questions. So I'm  
16 taking a look and seeing that there's no hands, no  
17 comments in the chat. Last call for any formal  
18 comments. Last call. All right. Seeing none, I'm  
19 going to go ahead and close the formal comment  
20 period and thank you all on behalf of EPA Region 5  
21 for joining us tonight and voicing your questions  
22 and your comments.

23                   Again, those are really important  
24 for the state to work that we're in and, again, we  
25 have, we're in this comment period. We'd love to

1 hear from you. If you have a comment you have  
2 until August 6 to submit that to us. So beyond  
3 that, we appreciate your participation tonight and  
4 have a wonderful evening.

5 (WHEREUPON, Zoom public meeting  
6 concluded at 7:19 p.m.)  
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## C E R T I F I C A T E

I, Jamie S. Hurley, a Court Reporter  
and Notary Public do hereby certify that the  
foregoing is a full, true and correct transcript of  
my notes taken in the above-styled case and  
thereafter transcribed by me.

*Jamie S. Hurley*  
\_\_\_\_\_  
Jamie S. Hurley

